

Using Risk Assessment Methodologies to meet Management Objectives

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Current decision making involves numerous possible combinations of technology elements, safety and health issues, operational aspects and process considerations to satisfy program goals. Identifying potential risk considerations as part of the management decision making process provides additional tools to make more informed management decision. Adapting and using risk assessment methodologies can generate new perspectives on various risk and safety concerns that are not immediately apparent. Safety and operational risks can be identified and final decisions can balance these considerations with cost and schedule risks. Additional assessments can also show likelihood of event occurrence and event consequence to provide a more informed basis for decision making, as well as cost effective mitigation strategies.

Methodologies available to perform Risk Assessments range from qualitative identification of risk potential, to detailed assessments where quantitative probabilities are calculated. Methodology used should be based on factors that include: 1) type of industry and industry standards, 2) tasks, tools, and environment 3) type and availability of data and 4) industry views and requirements regarding risk & reliability. Risk Assessments are a tool for decision makers to understand potential consequences and be in a position to reduce, mitigate or eliminate costly mistakes or catastrophic failures.